INTERNAL WORKING DOCUMENT NO.90:01

# 1989 AERIAL HERBICIDE APPLICATION PROGRAM

Natural Resources and Energy / Ressources naturelles et Énergie

TIMBER MANAGEMENT BRANCH

JANUARY, 1990

TABLE OF CONTENTS


| | | Page |
|---|---|---|
| Operational Review | | 1 |
| TABLE 1. | Chronological sequence of revisions proposed by the Licenses/Regions for the 1989 herbicide program. | 3 |
| TABLE 2. | Cost analysis of the 1989 program. | 4 |
| APPENDIX I | Permits issued by the Department of Municipal Affairs and Environment. | 6 |
| APPENDIX II | Spray Crew Organization. | 13 |
| APPENDIX III | Total Amount of Herbicide Used | 15 |
| APPENDIX IV | Spray production of DNRE crews. | 17 |
| APPENDIX V | Aircraft Spray Systems | 19 |
| APPENDIX VI | Summary of Individual Blocks Sprayed by Licensee Includes: Areas, herbicide rates, Volumes delivered, dates sprayed, crew and spray time. | 21 |

## OPERATION REVIEW

A total of 13 867 ha of Crown Land plantations and 5 470 ha of naturally regenerated cutovers were initially proposed for aerial herbicide treatment by the Licensees in 1989. Inspections of the proposed areas by DNRE staff and subsequent consultations between them and the Licensees resulted in a number of revised plans being submitted until a final version (TABLE 1) was ratified a week prior to the start of operations, totalling 17 333 ha of which, 10 977 ha were plantations, 4 155 ha were natural cutovers and 1 303 ha were "missed swaths" (banding) which occurred during the 1988 program.

A contract with Cedar Brook Farms Ltd. was renewed in 1989 for 2 Thrush fixed wing sprayers at a cost of $23.50 per hectare and 2 Bell 206B and 1 Aerospetiale A-Star were contracted from Pegasus Helicopters Inc. at a cost of $32.80 per hectare to carry out the aerial application. In addition, three spotter aircraft were contracted; 2 Hughes 300 C's from Helicraft Ltée and 1 Bell 47G4 from Pegasus, each at $240.00 per day plus $200 per flying hour. An agreement was also made with Forest Patrol Ltd. (J.D. Irving) to treat 758 hectares on their Crown limits at DNRE's costs.

A total of 104 590 L of Vision was procured for the 1989 program, including 11 845 L purchased in 1988 from Keywood Enterprises for $17.17/L, 11 500 L purchased in 1988 from Monsanto Canada Inc. for $13.20/L and 81 290 L purchased from Monsanto Canada Inc. in 1989 for $13.20/L.

On March 23, 1989 an application for a spray permit along with detailed maps of the areas requested for treatment were delivered to the Department of Municipal Arfairs and Environment (DMAE). On July 17, 1989 a formal permit was signed by its Minister giving Timber Management Branch the authorization to carry out not only the operational program but (Appendix I) also experimental trials using Garlon 4. DMAE was also notified of all revisions to the original submission.

All necessary mixing equipment, vehicles, trailers, etc. were procured and made ready several days prior to the commencement of the program. A total of 26 casual employees were hired for the spray operations (Appendix II).

Prior to the start of operational spraying, maps outlining the spray blocks were sent to Regional DNRE headquarters for dispersal to their District offices. These maps were used by Regional staff to inform the public as to spray locations. Regional staff supplied TMB spray crews with tanker services for mixing as well as experienced Ranger staff, who at times assisted in overall logistics.

Spraying commenced on the evening of August 14th. During the next 32 days, DNRE spray crews plus JDI were able to treat 17 105 ha of Crown land including 11 827 ha of plantations, 4 155 ha of naturally regenerated softwood cutovers and 1 303 ha of 1988 "banded" areas. Included in this total was 270 ha treated experimentally with Garlon 4.

A cost analysis of the 1989 program is found in Table 2. Appendices III through VI illustrates additional information on the program with respect to amount of herbicide used, spray production of DNRE crews, types of spray systems used, and rates, timing, location of each Licensee's blocks.

TABLE 1. Chronological sequence of revisions proposed by the Licensee/Regions for the 1989 Herbicide Program.

| Licensee | | NUMBER OF ha | | | | | | | ha ACTUALLY TREATED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 24/01/89 | 13/02/89 | 04/04/89 | 25/05/89 | 01/06/89 | 09/06/89 | 31/07/89 | 11/08/89 | Total | Plantations | 1988 banding | Natural Release |
| Upsalquitch | 1 | 2 029 | 2 029 | 1 972 | 2 029 | 2 007 | 2 007 | 1 774 | 1 774 | 1 763 | 1 392 | 371* | |
| Napisiguit | 1 | 1 411 | 1 411 | 890 | 1 411 | 1 411 | 1 411 | 1 446 | 1 446 | 1 672 | 1 554 | 118 | |
| Lower Miramichi | 1,2 | 350 | 350 | 350 | 350 | 345 | 345 | 442 | 442 | 408 | 394 | 14 | |
| Upper Miramichi | 2 | 500 | 500 | 500 | 500 | 500 | 500 | 172 | 172 | 178 | 178 | | |
| Kent | 2 | 200 | 200 | 200 | 200 | 200 | 200 | 124 | 64 | 31 | 31 | | |
| Queens Charlotte | 2 | 1 068 | 1 453 | 1 429 | 1 453 | 1 453 | 1 453 | 1 584 | 1 584 | 1 074 | 443 | 117 | 514 |
| | 3 | 1 783 | 5 375 | 4 377 | 5 473 | 5 270 | 5 270 | 5 445 | 4 744 | 4 702 | 2 064 | 180 | 2 638 |
| | 4 | 656 | 656 | 656 | 2 159 | 1 895 | 1 895 | 1 979 | 1 967 | 2 069 | 1 476 | 60 | 533 |
| | Total | 3 507 | 7 484 | 6 462 | 9 087 | 8 618 | 8 618 | 9 008 | 8 295 | 7 845 | 3 983 | 357 | 3 685 |
| Fundy | 3 | 1 656 | 1 656 | 1 656 | 1 656 | 1 587 | 1 587 | 1 563 | 1 563 | 1 542 | 1 059 | 50 | 433 |
| | 4 | 744 | 744 | 744 | 341 | 502 | 502 | 513 | 486 | 511 | 511 | | |
| | Total | 2 400 | 2 400 | 2 400 | 1 997 | 2 089 | 2 089 | 2 076 | 2 049 | 2 053 | 1 570 | 50 | 433 |
| York | 4 | 1 033 | 1 033 | 927 | 1 033 | 1 033 | 1 033 | 1 014 | 932 | 931 | 867 | 64 | |
| Carleton | 4 | 1 962 | 1 962 | 1 391 | 1 962 | 1 844 | 418 | 471 | 471 | 470 | 427 | 43 | |
| Restigouche Tobique | 1 | | | | | | | | | 299 | 181 | 118 | |
| | 5 | | | | | | | | | 1 455 | 1 256 | 168 | 37 |
| | Total | 5 916 | 5 916 | 5 197 | 6 471 | 6 471 | 1 900 | 1 670 | 1 688 | 1 754 | 1 431 | 286 | 37 |
| Totals | | 19 337 | 23 314 | 20 314 | 25 040 | 24 518 | 18 521 | 18 197 | 17 333 | 17 105 | 11 827 | 1 303* | 4 155 |
| Natural Release | | (5 470) | (7 980) | (7 969) | (7 964) | (8 096) | (5 823) | (4 965) | (4 784) | | | | |

* Includes 352 ha of 1987 banding (requested by Licensee).

TABLE 2. Cost analysis of the 1989 herbicide program.

| DNR | | TOTAL COST ($) | COST/HA ($) |
|---|---|---|---|
| 16 347 ha treated | | | |
| CHEMICAL | Vision (69 051 litres) | 891 337 | 54.53 |
| AIRCRAFT | Sprayers | 470 462 | 28.78 |
| | Spotters | 102 144 | 6.25 |
| | | 572 606 | 35.03 |
| LABOUR | Salaries | 87 772 | 5.37 |
| | Motels | 22 618 | 1.39 |
| | Expenses | 18 094 | 1.11 |
| | Groceries | 2 840 | .17 |
| | | 131 324 | 8.04 |
| VEHICLES | Rental | 45 176 | 2.76 |
| | Repairs | 1 294 | .08 |
| | Gas, Oil, etc. | 13 895 | .85 |
| | Tires | 1 536 | .09 |
| | | 61 898 | 3.78 |
| OTHER | Mixing Equipment | 5 809 | .35 |
| | Safety Equipment | 6 615 | .40 |
| | Other Supplies | 2 330 | .14 |
| | Communications | 3 475 | .21 |
| | Signs & Photo Supplies | 2 240 | .14 |
| | | 20 469 | 1.25 |
| TOTAL | | 1 677 634 | 102.62 |
| JDI | | | |
| 758 ha treated | | | |
| CHEMICAL | Vision (2 924 litres) (supplied by DNRE) | 38 597 | 50.92 |
| DNRE PAYMENT TO JDI FOR SPRAY COSTS (DNRE cost per hectare less chemical cost is 48.09 x 758 ha) | | 36 452 | 48.09 |
| TOTAL | | 75 049 | 99.01 |
| 17 105 ha treated | | 1 751 829 | 102.42 |
| * PERMANENT | Salaries | 16 290 | .95 |
| | Motels & Expenses | 8 204 | .48 |
| | Vehicle Mileage | 4 985 | .29 |
| TOTAL | | 29 479 | 1.72 |
| TOTAL | | 1 781 308 | 104.14 |

* Covers salaries of permanent staff during actual spray period (Aug. 13 to Sept. 14).

TABLE 2. Con't.

| | | TOTAL COST ($) | COST/HA ($) |
|---|---|---|---|
| HERBICIDE | Aircraft | 2 870 | |
| SURVEYS | Salaries | *50 845 | |
| | Motels | 6 775 | |
| | Expenses | 6 945 | |
| | Gas, oil, etc. | 4 307 | |
| TOTAL | | 71 742 | 4.19 |
| TOTAL | | $1 853 050 | 108.33 |

* $9,145 of these funds paid to employ a person to transfer all past herbicide areas to GIS system. Employed May/89 and Jan., Feb., March of 1990.

APPENDIX I

Spray Permit Issued by the
Department of Municipal Affairs and Environment

MINISTER OF THE ENVIRONMENT
Province of New Brunswick

MINISTRE DE L'ENVIRONNEMENT
Province du Nouveau-Brunswick

P.O. Box/C.P. 6000, Fredericton, N.B., Canada, E3B 5H1 Tel. (506) 453-2558

July 17, 1989

Department of Natural
Resources and Energy
Timber Management Branch
P. O. Box 6000
Fredericton, N. B.
E3B 5H1

Dear Sirs:

This will acknowledge receipt of your March 23, 1989 application on behalf of the Department of Natural Resources and Energy.

In accordance with Section 12(1) of the Pesticides Control Act, this Permit No. P40, hereby authorizes the aerial application of pesticides for site preparation and/or conifer release to 20,000 hectares of Crown land around the province as outlined in your submission, subject to the following conditions:

1. That only the following pesticide is permitted and must be used according to label instructions:

| HERBICIDES | PCP NO |
|---|---|
| Vision | 19,899 |

2. That additional areas and/or pesticides may be added to your permit only after written approval has been given;

3. That a setback from occupied habitation of 155 m be maintained;

4. That only those areas recommended by the Pesticides Advisory Board be treated;

5. That no spraying be conducted within 65 m of bodies of water with the exclusion of intermittent streams which are dry at the time of application;

6. That no spraying be conducted when wind speeds at the treatment area exceed 16 km/hr;

7. That no spraying be conducted 3.2 km upstream from the point of extraction of any municipal surface drinking water supplies;

8. That the areas to be treated are clearly identified for the pilot;

9. That access to the areas being treated be controlled and that signs be posted for the season;

10. That no human flagmen be used;

11. That all personnel involved in the supervision of mixing and loading operations; all personnel involved in the guidance of the aircraft administering the pesticide; and, all personnel applying the pesticide, must hold a valid Class A certificate;

12. That all personnel involved in the mixing and loading of pesticides must wear coveralls, footwear and gloves impermeable to the pesticide, splash shield and a half-faced respirator with NIOSH approved pesticide cartridges;

13. That the Chairman or staff of the Toxic Substances Section be notified a minimum of 48 hours prior to the intended date of the commencement of your program;

14. That cooperation be given to any monitoring personnel or inspector;

15. That the procedure for the disposal of empty pesticide containers be strictly adhered to;

16. That a summary of pesticides used for 1989 be forwarded to the Chairman of the Pesticides Advisory Board no later than December 31, 1989; and,

17. That this permit will expire September 30, 1989.

Sincerely,

for VAUGHN BLANEY
Minister of the Environment

MINISTER OF THE ENVIRONMENT
Province of New Brunswick

MINISTRE DE L'ENVIRONNEMENT
Province du Nouveau-Brunswick

P.O. Box/C.P. 6000, Fredericton, N.B., Canada, E3B 5H1 Tel. (506) 453-2558

August 10, 1989

Department of Natural
Resources and Energy
Timber Management Branch
P. O. Box 6000
Fredericton, N. B.
E3B 5H1

Dear Sirs:

This will acknowledge receipt of your March 23, 1989 application on behalf of the Department of Natural Resources and Energy.

In accordance with Section 12(1) of the Pesticides Control Act, this Permit No. P84, hereby authorizes the aerial application of for conifer release trials on a research basis to 300 hectares of Crown land around the province as outlined in your submission, subject to the following conditions:

1. That only the following pesticides are permitted and must be used in accordance with any conditions, restrictions and label rates associated with the Federal Research Permit # 256-RP-89;

| HERBICIDES | PCP NO |
|---|---|
| Garlon 4 | 21,053 |
| Vision | 19,899 |

2. That additional areas and/or pesticides may be added to your permit only after written approval has been given;

3. That mixing of Garlon and Vision will be permitted only at the rates defined in the Federal Research Permit # 256-RP-89;

4. That a setback from occupied habitation of 3.2 km be maintained;

5. That no spraying be conducted within 500 m of bodies of water with the exclusion of intermittent streams which are dry at the time of application;

6. That no spraying be conducted when wind speeds at the treatment area exceed 8 km/hr and/or when the temperature at the treatment site exceeds 25 degrees Centigrade;

7. That no spraying be conducted 3.2 km upstream from the point of extraction of any municipal surface drinking water supplies;

8. That the areas to be treated are clearly identified for the pilot;

9. That access to the areas being treated be controlled and that signs be posted for the season;

10. That no human flagmen be used;

11. That all personnel involved in the supervision of mixing and loading operations; all personnel involved in the guidance of the aircraft administering the pesticide; and, all personnel applying the pesticide, must hold a valid Class A certificate;

12. That all personnel involved in the mixing and loading of pesticides must wear coveralls, footwear and gloves impermeable to the pesticide, splash shield and a half-faced respirator with NIOSH approved pesticide cartridges;

13. That the Chairman or staff of the Toxic Substances Section be notified a minimum of 48 hours prior to the intended date of the commencement of your program;

14. That cooperation be given to any monitoring personnel or inspector;

15. That the procedure for the disposal of empty pesticide containers be strictly adhered to;

16. That a summary of pesticides used for 1989 be forwarded to the Chairman of the Pesticides Advisory Board no later than December 31, 1989;

17. That a copy of the results of the research trials (when available) be forwarded to the Toxic Substances Section; and,

18. That this permit will expire September 30, 1989.

Sincerely,

Vaughn Blaney

VAUGHN BLANEY
Minister of the Environment

# APPENDIX II

## Spray Crew Organization

# 1989 HERBICIDE SPRAY OPERATION

## ORGANIZATION

John Reed
Acting Director Reforestation and Silviculture

Mack McDonald
Chief of Operations
Supervisor Crew #1
1 Hughes 300 C Spotter
2 Bell 206 B Sprayers
Ground Supervisor - Brian Black

Mike Bartlett
Supervisor Crew #2
1 Hughes 300 C Spotter
2 Thrush S2R Sprayers
Ground Supervisor-Richard Courier

Don Carlin
Supervisor Crew #3
1 Bell 47G4 Spotter
1 Aerospatiale A-Star Sprayer
Ground Supervisor-Chuck Harding

Each ground crew also included a mixer, a loader, two truck drivers and 4 road blockers.

JDI - Contracted
Forest Patrol Ltd.
2 Cessna 172 Spotters
3 Thrush S2R Sprayers
3 Turbo Thrush Sprayers

# APPENDIX III

## Total Amount of Herbicide Used

## Amount of Herbicide Used

| Herbicide | Rate (L) | Total Volume of Spray Delivered (L) | *Number of Chemical ha | Amount Herbicide Used (Litres) |
|---|---|---|---|---|
| Vision | 2.1 | 1 228 | 32.8 | 69 |
| | 3.7 | 54 661 | 1461.5 | 5 408 |
| | 4.2 | 472 856 | 12643.2 | 53 102 |
| | 4.9 | 102 448 | 2939.2 | 13 423 |
| | Total | 631 193 | 16876.7 | 72 002 |
| Garlon | 2.1 | 1 228 | 32.8 | 69 |
| | 4.2 | 6 672 | 178.4 | 750 |
| | 4.9 | 3 002 | 80.3 | 394 |
| | Total | 10 902 | 291.5 | 1 213 |

| | |
|---|---|
| Pre Spray Vision Inventory | 93 070 L ($1,275,549) |
| Amount Used by DNRE | 69 051 L |
| Amount Used by J.D.I. | 4 025 L |
| | 73 076 L |
| Post Spray Vision Inventory | 19 650 L ($ 259,380) |
| | 92 726 L |
| Amount Unaccounted for | 344 L (0.47% error) well within acceptable operational error due to mixing ( 1%) |

* Chemical ha refers to the number of ha that should have been treated without overlapping or skipping swaths. It is calculated as follows:

$$\text{\# Chemical ha} = \frac{\text{\# L delivered}}{\text{37.4 L/ha (calibrated per ha rate)}}$$

# APPENDIX IV

## Spray Production of DNRE Crews

Spray Production of DNRE Crews

| | Crew #1<br>2 Jet Rangers | Crew #2<br>2 Thrushes | Crew #3<br>1 A-Star | Total |
|---|---|---|---|---|
| Total # ha treated | 5 968 | 5 821 | 4 554 | 16 343 |
| Total # L delivered | 245 077 | 220 233 | 146 946 | 612 256 |
| # chemical ha<br>(# L delivered - 37.4 L/ha) | 6 553 | 5 889 | 3 929 | 16 371 |
| % overspray | 9.8 | 1.1 | -13.7 | 0.2 |
| Total number of spray hours | 97.78 | 129.27 | 61.96 | 289.01 |
| # ha treated per spray hour | 61.0 | 45.0 | 73.5 | 179.5 |
| # L delivered per spray hour | 2 506 | 1 704 | 2 372 | 6 582 |
| # chemical ha per spray hour | 67.0 | 45.6 | 63.4 | 176 |

# APPENDIX V

## Aircraft Spray Systems

## Spray Systems

| Aircraft | Swath Width | Speed | Type and # Nozzles, Pressure, etc. |
|---|---|---|---|
| DNRE Crew #1 | | | |
| MAH | 68' | 70 mph | 52 D8 Teejet with #45 swirls @ 27 psi |
| FBV | 68' | 70 mph | 56 D8 Teejet with #45 swirls @ 24 psi |
| DNRE Crew #2 | | | |
| SOW | 80' | 110 mph | 37 D10 with #56 swirls @ 30 psi |
| SOP | 80' | 110 mph | 37 D10 with #56 swirls @ 30 psi |
| DNRE Crew #3 | | | |
| PHI | 68' | 80 mph | 53 D8 Teejet with #45 swirls + 2 D10 Teejet with #46 swirls (end of boom) @ 23 psi |
| JDI | | | |
| MQC | 70' | 125 mph | 4 AU 4000 Micronair @ 3500 rpm; 30-45psi |
| MQB | 70' | 125 mph | " |
| MQA | 70' | 125 mph | 72 "Whirljet" 1/8 B10 nozzles with #3 tips; 30-45 psi |
| BEJ | 70' | 105 mph | " |
| ZTE | 70' | 105 mph | " |
| BED | 70' | 105 mph | " |

APPENDIX VI

Summary of Individual Blocks Sprayed by Licensee
Includes: Areas, herbicide rates, Volume delivered, date Sprayed,
Crew and Spray Time

1989 HERBICIDE PROGRAM

LICENSEE: Upsalquitch

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 1-1-4319 | East of Lawson Bk. | 0519 | 20 | 22 | 4.2 | 758 | 8/19 pm | CBF .53 |
| 1-1-4320 | Williams Bk. | 0523 | 95 | 115 | 4.2 | 4 075 | 8/19 pm, 22 pm, 27 pm | " 2.08 |
| 1-1-4320 | Williams Bk. | 0532 | 75 | 84 | 4.2 | 3 032 | 8/22 pm | " 1.38 |
| 1-1-4321 | Mount Gordon | 0533 | 16 | 21 | 4.2 | 643 | 8/22 pm | " .32 |
| 1-1-4917 | S.Upper Tetagouche Lk. | 0119 | 81 | 81 | 4.2 | 3 032 | 8/27 am | " 2.73 |
| 1-1-4817 | Campbell Bk. | 0123 | 73 | 89 | 4.2 | 3 032 | 8/28 am | " 1.40 |
| " | " | 0116 | 20 | 31 | 4.2 | 1 432 | 8/28 am | " .88 |
| " | " | 0115 | 46 | 43 | 4.2 | 1 600 | 8/28 am | " 1.16 |
| 1-1-4916 | N.W. McRae Lake | 0415 | 71 | 81 | 4.2 | 2 926 | 8/28 am | " 1.63 |
| " | " | 0416 | 166 | 195 | 4.2 | 6 170 | 8/28 am | " 2.62 |
| 1-1-4614 | Arseneau Lk. | 0031 | 23 | 18 | 4.2 | 842 | 8/28 am | " .60 |
| 1-1-4716 | N.W. Jacket River Lk. | 0089 | 41 | 47 | 4.2 | 1 516 | 8/28 pm | " .80 |
| 1-1-4518 | McCormack Bk. | 0502 | 72 | 84 | 4.2 | 3 032 | 8/28 pm | " .97 |
| 1-1-4620 | Second Portage Lk. | 0512 | 63 | 42 | 4.2 | 1 516 | 8/28 pm | " .58 |
| 1-1-4912 | S. Br. Benjamin R. | 0318 | 84 | 107 | 4.2 | 3 263 | 9/01 am, 04 am | " 2.38 |
| 1-1-4913 | Long Pond Bk. | 0313 | 95 | 118 | 4.2 | 4 088 | 9/01 am | " 2.08 |
| " | " | 0314 | 37 | 46 | 4.2 | 4 005 | 9/03 am, 04 am | " 2.53 |
| 1-1-4915 | McNair Bk. | 0300 | 62 | 76 | 4.2 | 2 839 | 9/04 am, 05 pm | " 2.48 |
| " | " | 0301 | 86 | 92 | 4.2 | 3 180 | 9/04 am, 05 pm | " 2.48 |
| Sub-Total | | | 1 226 | 1 392 | 4.2 | 50 981 | | 29.63 |
| 1-1-4914 | 1988 banding | 0309(n) | 15 | 19 | 4.2 | 719 | 9/04 am | .70 |
| 1-1-4414 | 1987 banding | 0039 | 26 | 35 | 4.2 | 1 306 | 8/20 am | 1.00 |
| " | " | 0038 | 52 | 26 | 4.2 | 968 | 8/20 am | .58 |
| 1-1-4413 | " | 0705 | 32 | 28 | 4.2 | 1 065 | 8/20 am | 1.25 |
| 1-1-4414 | " | 0715 | 11 | 12 | 4.2 | 452 | 8/20 am | .77 |
| 1-1-4513 | " | 0034 | 14 | 13 | 4.2 | 473 | 8/20 am | .33 |

1989 HERBICIDE PROGRAM

LICENSEE: Upsalquitch (Cont'd)

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| I-I-4513 | 1987 banding | 0035 | 53 | 31 | 4.2 | I 152 | 8/20 am | CBF .83 |
| " | " | 0036 | 11 | 4 | 4.2 | 155 | 8/20 am | " .26 |
| " | " | 0725 | 9 | 13 | 4.2 | 493 | 8/20 am | " .35 |
| I-I-4320 | " | 0529 | 32 | 40 | 4.2 | I 516 | 8/22 pm | " .58 |
| I-I-4520 | " | 0513 (n) | 18 | 33 | 4.2 | I 218 | 8/27 pm, 29 am | " .65 |
| I-I-4517 | " | 0056 | 12 | 14 | 4.2 | 511 | 8/29 am | " .28 |
| I-I-4914 | " | 1121 | 57 | 75 | 4.2 | 2 801 | 9/04 am | " 1.88 |
| I-I-4915 | " | 0302 (n) | 24 | 28 | 4.2 | I 060 | 9/04 am | " .87 |
| Sub-Total | | | 366 | 371 | 4.2 | 13 889 | | 10.33 |
| | | | 57 (n) | 80 (n) | | | | |
| TOTAL | | | I 592 | I 763 | 4.2 | 64 870 | | 39.96 |
| | | | 57 (n) | 80 (n) | | | | |

## 1989 HERBICIDE PROGRAM

LICENSEE: Nepisiguit

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 1-2-4920 | Indian Lake | 0049 | 32 | 34 | 4.2 | 1 175 | 8/24 am | CBF .63 |
| 1-2-4921 | Strachens Lake | 0029 | 67 | 103 | 4.2 | 1 805 | 8/24 am | " 1.61 |
| " | " | 0071 | 38 | 47 | 4.2 | 810 | 8/24 am | " .70 |
| 1-2-4919 | Woodside Bk. | 0305 | 35 | 34 | 4.2 | 1 440 | 8/27 am | " .90 |
| 1-2-4819 | Camel Back Mtn. | 0232 | 17 | 17 | 4.2 | 644 | 8/27 am | " .51 |
| 1-2-4820 | W. Forty-four Mile Bk. | 9688 | 26 | 25 | 4.2 | 872 | 8/27 am | " .80 |
| 1-2-4421 | Upper E. Br. Moose Bk. | 0258 | 19 | 18 | 4.2 | 1 031 | 8/27 pm | " .60 |
| 1-2-5018 | E. of Lucky Lk. | 0045 | 60 | 71 | 4.2 | 2 732 | 8/29 am | " 2.02 |
| " | " | 0290 | 3 | 3 | 4.2 | 300 | 8/29 am | " .28 |
| 1-2-5119 | S. Br. Middle R. | 0097 | 42 | 45 | 4.2 | 1 701 | 8/29 am, 9/05 am | " 1.62 |
| 1-2-5219 | S. of Middle R. | 9575 | 74 | 66 | 4.2 | 2 952 | 8/29 pm | " 1.00 |
| " | " | 0306 | 111 | 118 | 4.2 | 4 467 | 8/29 pm, 9/02 pm, 04 pm, 07 am | " 1.78 |
| 1-2-5118 | N. Br. Middle R. | 0102 | 43 | 44 | 4.2 | 1 968 | 8/30 am, 31 am | " 1.23 |
| 1-2-5219 | S. of Middle R. | 0199 | 53 | 66 | 4.2 | 2 210 | 8/13 pm, 9/04 pm | " .95 |
| 1-2-5319 | S. Br. Little R. | 0410 | 21 | 20 | 4.2 | 908 | 9/02 pm | " .27 |
| 1-2-5218 | Middle R. | 0056 | 53 | 60 | 4.2 | 2 786 | 9/03 pm, 04 pm | " 1.28 |
| 1-2-5219 | S. of Middle R. | 0279 | 79 | 77 | 4.2 | 3 597 | 9/03 pm, 04 pm, 07 am | " 1.67 |
| 1-2-5018 | E. of Lucky Lk. | 0046 | 17 | 17 | 4.2 | 837 | 9/05 am | " .62 |
| 1-2-5119 | S. Br. Middle R. | 0101 | 43 | 49 | 4.2 | 2 268 | 9/05 am, 07 am | " 1.62 |
| 1-2-5320 | Rocky Bk. | 9651 | 58 | 69 | 4.2 | 2 491 | 9/05 am | " .87 |
| 1-2-5319 | S. Br. Little R. | 0051 | 23 | 23 | 4.2 | 1 332 | 9/05 am | " .75 |
| 1-2-5120 | Nine Mile Bk. | 0047 | 82 | 95 | 4.2 | 3 888 | 9/05 pm | " 2.17 |
| " | " | 0038 | 7 | 8 | 4.2 | 307 | 9/05 pm | " .22 |
| " | " | 0225 | 28 | 25 | 4.2 | 1 786 | 9/05 pm, 07 am | " 1.41 |
| 1-2-5023 | E. of Otter Lk. | 0276 | 20 | 21 | 4.2 | 1 060 | 9/06 am | " 1.03 |
| 1-2-5122 | S.E. of Canoe Landing Lk. | 0078 | 70 | 84 | 4.2 | 3 180 | 9/06 am | " 1.77 |

1989 HERBICIDE PROGRAM

LICENSEE: Nepisiguit (Con't)

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 1-2-5120 | Nine Mile Bk. | 0050 | 25 | 38 | 4.2 | 1 155 | 9/06 am, 07 am | CBF .82 |
| 1-2-5020 | Forty-mile Bk. | 9656 | 52 | 65 | 4.2 | 2 423 | 9/07 am | " 1.67 |
| " | " | 0274 | 27 | 25 | 4.2 | 1 172 | 9/07 am | " .93 |
| " | " | 0275 | 19 | 21 | 4.2 | 927 | 9/07 am | " .77 |
| 1-2-5118 | N. Br. Middle R. | 0106 | 34 | 34 | 4.2 | 1 552 | 9/07 am | " .93 |
| 1-2-5918 | Butte-d'Or | 0461 | 113 | 123 | 4.2 | 4 429 | 9/07 pm, 08 pm | " 2.87 |
| 1-2-5718 | Big Tracadie R. | 0220 | 6 | 5 | 4.2 | 265 | 9/08 pm | " .22 |
| 1-2-5621 | Staughan Bk. | 0291 | 4 | 4 | 4.2 | 151 | 9/10 am | " .66 |
| Sub-Total | | | 1 411 | 1 554 | 4.2 | 60 621 | | 37.18 |
| 1-2-4819 | 1988 Banding | 9687 | 20 | 94 | 4.2 | 3 108 | 8/27 am | CBF 1.45 |
| 1-2-5219 | " | 9660 | 15 | 14 | 4.2 | 530 | 9/02 pm | " .25 |
| Sub-Total | | | 35 | 118 | 4.2 | 3 638 | | 1.70 |
| TOTAL | | | 1 446 | 1 672 | 4.2 | 64 259 | | 38.88 |

## 1989 HERBICIDE PROGRAM

LICENSEE: Lower Miramichi

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) | |
|---|---|---|---|---|---|---|---|---|---|
| 1-3-5822 | Pisigwit Bk. | 0055 | 108 | 106 | 4.2 | 3 479 | 9/09 pm, 10 am | CBF | 2.18 |
| 2-3-5040 | S. B. Muzroll Bk. | 0053 | 2 | 2 | 4.9 | 100 | 9/11 am | Peg 2 | .08 |
| 2-3-5127 | N. Br. Sevogle R. | 0085 | 46 | 52 | 4.2 | 1 836 | 9/08 am | CBF | 1.82 |
| 2-3-5438 | Horseshoe Bend - Cains R. | 0050 | 38 | 39 | 4.2 | 1 715 | 9/11 am | " | 1.00 |
| 2-3-5537 | Salmon Bk. | 0119 | 38 | 40 | 4.2 | 1 601 | 9/11 am | " | .97 |
| 2-3-5436 | Black Bk. | 0175 | 46 | 49 | 4.2 | 2 335 | 9/11 am | " | 1.50 |
| " | " | 0174 | 44 | 45 | 4.2 | 2 002 | 9/11 am | " | 1.30 |
| 2-3-5536 | S. Br. Black Bk. | 0060 | 23 | 24 | 4.2 | 1 026 | 9/11 am | " | .60 |
| 2-3-5437 | Otter Bk./Cains R. | 0432 | 37 | 37 | 4.2 | 1 506 | 9/11 am | " | .75 |
| Sub-Total | | | 274 | 288 | 4.2 | 12 021 | | | 8.07 |
| | | | | | 4.9 | 100 | | | |
| | | | | | | 12 121 | | | |
| 2-3-5227 | 1988 Banding | 0026 | 60 | 14 | 4.2 | 530 | 9/08 am | CBF | .58 |
| Total Region 2 | | | 334 | 302 | 4.2 | 12 551 | | | 8.65 |
| | | | | | 4.9 | 100 | | | |
| | | | | | | 12 651 | | | |
| TOTAL | | | 442 | 408 | 4.2 | 16 030 | | | 10.83 |
| | | | | | 4.9 | 100 | | | |
| | | | | | | 16 130 | | | |

LICENSEE: Lower Miramichi

## 1989 HERBICIDE PROGRAM

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 2-4-5325 | Tomogonops R. | 0049 | 54 | 56 | 4.2 | 1 874 | 9/08 am | CBF 1.77 |
| 2-4-5725 | N. of Bartibog | 0005 | 68 | 67 | 4.2 | 2 420 | 9/09 pm | " .92 |
| 2-4-5237 | N. of Weaver Siding | 0660 | 41 | 46 | 4.2 | 2 013 | 9/10 pm, 11 am | " 1.00 |
| 2-4-4732 | E. of Lower Kennedy Lk. | 0027 | 9 | 9 | 4.9 | 300 | 9/13 am | Peg 2 .67 |
| TOTAL | | | 172 | 178 | 4.2 | 6 307 | | 4.36 |
| | | | | | 4.9 | 300 | | |
| | | | | | | 6 607 | | |

## 1989 HERBICIDE PROGRAM

LICENSEE: Kent

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 2-5-5938 | 1988 Banding | 0218 | 25 | 1 | 4.9 | 50 | 8/28 am | Peg 2 .25 |
| 2-5-5935 | Acadiaville | 0038 | 9 | 9 | 4.9 | 350 | 8/28 am | .57 |
| 2-5-6038 | N. W. of Molus R. | 0076 | 30 | 21 | 4.9 | 500 | 8/28 am | .80 |
| TOTAL | | | 64 | 31 | 4.9 | 900 | | 1.62 |

## 1989 HERBICIDE PROGRAM

LICENSEE: Queens Charlotte

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 2-6-4741 | Astle | 0007 | 30 | 31 | 4.2 | 1 270 | 9/11 am | Peg 2 1.13 |
| 2-6-4941 | Otter Bk. Rd. | 4508 (n) | 167 | 162 | 4.9 | 4 690 | 9/11 am | " 1.50 |
| 2-6-4741 | Astle | 0003 | 35 | 38 | 4.2 | 1 200 | 9/11 am | " .45 |
| 2-6-4840 | Porter Cove | 1067 | 100 | 102 | 4.2 | 4 470 | 9/12 am | " 2.20 |
| 2-6-4740 | Porter Cove | 1065 | 140 | 144 | 4.2 | 3 960 | 9/12 am | " 1.52 |
| " | " | 1066 | 145 | 128 | 4.2 | 5 090 | 9/12 am | " 2.07 |
| 2-6-4838 | Big Hole Lk. Bk. | 4502 (n) | 229 | 32 | 4.9 | 1 100 | 9/12 pm | " .48 |
| " | " | 4504 (n) | 152 | 141 | 4.9 | 3 600 | 9/12 pm | " 1.37 |
| " | " | 4501 (n) | 155 | 66 | 4.9 | 1 800 | 9/12 pm, 13 am | " .78 |
| 2-6-4735 | Dungarvan R. | 4506 (n) | 100 | 113 | 4.9 | 3 210 | 9/13 am | " 1.33 |
| Sub-Total | | | 1 253 | 957 | 4.2 | 15 990 | | 12.83 |
| | | | | | 4.9 | 14 400 | | |
| | | | 803 (n) | 514 (n) | | 30 390 | | |
| 2-6-5142 | 1988 Banding | 1711 (n) | 80 | 72 | 4.2 | 2 680 | 9/10 pm, 11 am | Peg 2 1.18 |
| 2-6-4937 | " | 3485 (n) | 75 | 15 | 4.9 | 550 | 9/13 am | " .17 |
| 2-6-4940 | " | 9979 | 15 | 15 | 4.9 | 570 | 9/11 am | " .21 |
| 2-6-4742 | 1987 Banding | 0003A | 15 | 15 | 4.2 | 570 | 9/11 am | " .20 |
| Sub-Total | | | 185 | 117 | 4.2 | 3 250 | | 1.76 |
| | | | | | 4.9 | 1 120 | | |
| | | | 155 (n) | 97 (n) | | 4 370 | | |
| Region 2 Total | | | 1 438 | 1 074 | 4.2 | 19 240 | | 14.59 |
| | | | | | 4.9 | 15 520 | | |
| | | | 958 (n) | 611 (n) | | 34 760 | | |

## 1989 HERBICIDE PROGRAM

LICENSEE: Queens Charlotte (Con't)

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 3-6-5739 | South Forks Stm. | 4547 | 23 | 22 | 4.2 | 440 | 8/26 pm | Peg. 2 .15 |
| " | " | 4548 | 95 | 99 | 4.2 | 2 260 | 8/26 pm, 27 am | " 1.81 |
| | | | | | 4.9 | 1 050 | | |
| " | " | 4874 | 386 (n) | 372 (n) | 4.9 | 9 707 | 8/27 am, pm; 28 am | " 4.15 |
| | | | 11 (P) | 11 (P) | | | | |
| 3-6-5842 | Horton Bk. | 9988 | 27 | 28 | 4.9 | 1 000 | 8/28 am | " .91 |
| 3-6-5743 | Lake Stm. | 4544 | 80 | 88 | 4.9 | 2 570 | 8/28 pm | " .88 |
| " | " | 4545 | 61 | 59 | 4.9 | 1 990 | 8/28 pm; 9/03 am | " .90 |
| 3-6-5744 | Coal Pad. | 4872 (n) | 284 | 288 | 4.9 | 7 990 | 8/29 am; 9/03 am | " 3.03 |
| " | " | 4543 (n) | 139 | 119 | 4.9 | 3 350 | 8/29 am | " 1.25 |
| " | " | 4541 (n) | 197 | 196 | 4.9 | 7 366 | 8/13 am; 9/01 am | " 2.25 |
| " | " | 4542 (n) | 205 | 196 | 4.9 | 6 825 | 9/01 am, 02 pm | " 3.53 |
| | | | | *43 resprayed | | 1 340 | | |
| 3-6-5743 | Lake Stm | 4873 (n) | 115 | 115 | 4.9 | 3 015 | 9/02 pm, 03 am | " 1.45 |
| 3-6-5644 | " | 1437 | 27 | 31 | 4.9 | 1 005 | 9/03 am | " .38 |
| 3-6-5644 | Coy Bk. | 4518 | 77 | 76 | 4.2 | 2 010 | 9/03 am | " .73 |
| " | " | 4499 (n) | 210 | 239 | 4.9 | 7 705 | 9/03 pm, 04 am | " 2.40 |
| 3-6-5745 | Lake Stm. Lk. | 0596 (n) | 19 | 14 | 4.9 | 335 | 9/04 am | " .08 |
| " | " | 0575 (n) | 119 | 121 | 4.9 | 3 330 | 9/04 am | " 1.40 |
| 3-6-5547 | Cameron Lk. | 0369 (n) | 47 | 47 | 4.9 | 2 010 | 9/05 am | " .63 |
| 3-6-5545 | Blackwater Bk. | 0116 (n) | 180 | 157 | 4.9 | 6 030 | 9/05 am, pm; 06 am | " 1.97 |
| 3-6-5644 | Coy Bk. | 1696 | 120 | 27 | Garlon @ 4.2 | 1 120 | 9/07 pm, 08 am | " 1.17 |
| | | | | 13 | Garlon @ 2.1 & Vision @ 2.1 | 470 | | |
| | | | | 87 | Vision @ 4.2 | 1 340 | | |

## 1989 HERBICIDE PROGRAM

LICENSEE: Queens Charlotte (Con't)

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 3-6-5644 | Coy Bk. | 4193 (n) | 101 | 37 | Garlon @ 4.2 | 1 120 | 9/08 am | Peg 2 1.45 |
| | | | | 37 | Garlon @ 4.9 | 1 130 | | |
| | | | | 7 | Vision @ 4.2 | 670 | | |
| | | | | 7 | Vision @ 4.9 | 450 | | |
| 3-6-5545 | Blackwater Bk. | 4508 | 15 | 10 | 4.2 | 1 340 | 9/08 am | " .63 |
| 3-6-5643 | Salmon R. | 4552 | 100 | 163 | 4.2 | 5 960 | 9/08 pm, 09 am | " 2.58 |
| 3-6-5242 | Mountain Bk. | 4554 | 29 (n) | 21 (n) | 13-Garlon @ 4.2 | 560 | 9/09 pm, 10 am | " .93 |
| | | | 44 (P) | 44 (P) | 52-Vision @ 4.2 | 1 340 | 9/09 pm, 10 am | |
| 3-6-5342 | Pleasant Bk. | 4553 | 23 | 28 | 4.2 | 1 170 | 9/09 pm, 10 am | " .57 |
| 3-6-5143 | Gaspereau R. | 4555 | 20 | 16 | 4.2 | 670 | 9/10 am | " .25 |
| 3-6-5541 | Mountain Bk. | 0122 (n) | 34 | 36 | 4.2 | 1 287 | 9/12 am | CBF .77 |
| 3-6-5541 | Mountain Bk. | 0568 (n) | 171 | 106 | 4.2 | 4 117 | 9/12 am | " 2.00 |
| 3-6-5442 | McLeod Bk. | 1689 (n) | 82 | 81 | 4.2 | 2 959 | 9/12 am | " 1.86 |
| 3-6-5641 | Little Forks Stm. | 0907 | 123 | 93 | 4.2 | 3 602 | 9/12 am | " 1.35 |
| " | " | 0595 | 126 | 149 | 4.2 | 5 597 | 9/12 am | " 2.23 |
| 3-6-5445 | Bronson Settlement | 1244 (n) | 71 | 71 | 4.2 | 2 425 | 9/13 am | " 1.55 |
| 3-6-5444 | Harley Rd. | 0902 (n) | 105 | 108 | 4.2 | 3 632 | 9/13 am | " 1.75 |
| 3-6-5942 | South Forks Bk. | 0108 | 170 | 169 | 4.2 | 6 356 | 9/13 am, pm; 14 am | " 2.60 |
| 3-6-5943 | Coal Branch Lk. | 0581 | 59 (n) | 49 (n) | 4.2 | 4 540 | 9/14 am | " 2.07 |
| | | | 74 (P) | 74 (P) | | | | |
| 3-6-5641 | Little Forks Stm. | 4551 | 40 | 53 | 4.2 | 2 357 | 9/14 am | " .77 |
| 3-6-4943 | Slingdung Bk. | 0904 | 73 | 73 | 3.7 | 3 633 | 9/03 am | JDI N/A |
| " | " | 0704 | 100 | 100 | 3.7 | 835 | 9/03 am | " N/A |
| | | | | | 4.2 | 3 591 | | |
| 3-6-5043 | Gordon Bk. | 1326 | 71 | 71 | 3.7 | 450 | 9/03 am | " N/A |
| | | | | | 4.2 | 2 268 | | |

1989 HERBICIDE PROGRAM

LICENSEE: Queens Charlotte (Con't)

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 3-6-5043 | Gordon Bk. | 1355 | 69 | 69 | 3.7 | 2 268 | 9/03 am | " N/A |
| 3-6-4944 | McKinley Bk. | 1680 | 253 | 253 | 3.7 | 8 139 | 9/02 am, 03 am | " N/A |
| 3-6-5044 | E. of Gaspereau Lk. | 1353 | 34 (n) | 34 (n) | 3.7 | 1 514 | 9/02 am, 03 am | " N/A |
| | | | 158 (P) | 158 (P) | 4.2 | 5 299 | | |
| Sub-Total | | | 4 567 | 4 522 | 3.7 | 16 839 | | 52.43 |
| | | | 2 487 (n) | 2 458 (n) | 4.2 | 65 230 | | |
| | | | | | 4.9 | 67 068 | | |
| | | | | | Garlon (2.1) & Vision(2.1) | 470 | | |
| | | | | | Garlon @ 4.2 | 2 800 | | |
| | | | | | Garlon @ 4.9 | 1 130 | | |
| | | | | | | 153 537 | | |
| 3-6-5143 | 1988 Banding | 4495 (n) | 30 | 18 | 4.2 | 670 | 9/11 am | Peg 2 .15 |
| 3-6-5044 | " | 1668 (n) | 80 | 72 | 4.2 | 2 680 | 9/11 am | " 1.10 |
| 3-6-4943 | " | 1357 (n) | 25 | 36 | 4.2 | 1 340 | 9/11 am | " .63 |
| 3-6-4944 | " | 1680 (n) | 40 | 54 | 4.2 | 2 010 | 9/11 am | " .72 |
| Sub-Total | | | 175 (n) | 180 (n) | 4.2 | 6 700 | | 2.60 |
| Region 3 Total | | | 4 742 | 4 702 | 3.7 | 16 839 | | 55.03 |
| | | | 2 562 (n) | 2 638 (n) | 4.2 | 71 930 | | |
| | | | | | 4.9 | 67 068 | | |
| | | | | | Garlon (2.1) & Vision (2.1) | 478 | | |
| | | | | | Garlon 4.2 | 2 800 | | |
| | | | | | Garlon 4.9 | 1 130 | | |
| | | | | | | 160 245 | | |

* 43 hectares of block 4542 were resprayed due to rainwash (does not show up in total).

## 1989 HERBICIDE PROGRAM

LICENSEE: Queens Charlotte

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 4-6-4558 | East of Black Bk. | 9949 (n) | 80 | 84 | 4.2 | 1 520 | 9/03 pm | Reg 1 1.00 |
| | | | | | 4.9 | 1 650 | | |
| 4-6-4557 | South of Tracy | 0205 (n) | 17 | 17 | 4.9 | 830 | 9/03 pm | " .32 |
| " | " | 0203 (n) | 40 | 40 | 4.9 | 1 600 | 9/03 pm | " .52 |
| " | " | 0204 (n) | 43 | 43 | 4.2 | 400 | 9/04 am | " .90 |
| | | | | | 4.9 | 1 200 | | |
| 4-6-4458 | South of Shin Ck. | 0345 | 22 | 27 | 4.2 | 1 200 | 9/04 am | " 1.25 |
| " | " | 0745 | 80 | 81 | 4.2 | 3 600 | 9/04 am | " 1.28 |
| 4-6-4459 | West of McDougall Bk | 0543 | 22 | 28 | 4.2 | 800 | 9/04 am | " .35 |
| 4-6-4358 | Oak Ridge | 0757 | 205 | 240 | 4.2 | 9 600 | 9/04 am, pm | " 3.47 |
| 4-6-4460 | Cranberry Lk. | 1147 | 10 | 4 | 4.2 | 200 | 9/05 am | " .12 |
| 4-6-4360 | Niles Bk. | 0149 | 4 | 4 | 4.2 | 200 | 9/05 am | " .12 |
| " | " | 9931 | 30 | 33 | 4.2 | 1 200 | 9/05 am | " .62 |
| 4-6-4359 | Brown Ridge | 0752 | 36 | 36 | 4.2 | 1 600 | 9/05 am | " .57 |
| 4-6-4460 | Cranberry Lk | 1133 | 48 | 57 | 4.2 | 1 757 | 9/05 am | " .50 |
| " | " | 0535 | 57 | 59 | 4.2 | 2 243 | 9/05 am | " .83 |
| 4-6-4462 | McDougall Inlet | 0150 | 48 | 46 | 4.2 | 1 800 | 9/05 am | " .57 |
| " | " | 0537 | 78 (n) | 88 (n) | 4.2 | 5 530 | 9/05 am, pm | " 1.42 |
| | | | 52 (p) | 52 (P) | | | | |
| 4-6-4362 | N. of Oxbow Lk | 0348 | 14 | 20 | 4.2 | 670 | 9/05 pm | " .31 |
| 4-6-4462 | McDougall Inlet | 0156 | 77 | 88 | 4.2 | 3 600 | 9/05 pm, 06 am | " 1.10 |
| 4-6-4564 | New River | 9947 | 10 | 10 | 4.2 | 400 | 9/06 am | " .33 |
| 4-6-4561 | W. of S. Oromocto Lk | 0163 (n) | 7 | 7 | 4.2 | 270 | 9/06 am | " .18 |
| " | " | 0164 | 8 | 8 | 4.2 | 400 | 9/06 am | " .29 |
| 4-6-4562 | S. of S. Oromocto Lk | 9543 | 15 | 23 | 4.2 | 930 | 9/06 am | " .42 |
| 4-6-4462 | McDougall Inlet | 0158 | 65 | 67 | 4.2 | 2 350 | 9/06 am | " 1.03 |

## 1989 HERBICIDE PROGRAM

LICENSEE: Queens Charlotte (Con't)

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 4-6-4662 | E. of West Long Lk. | 0334 | 36 (n) | 35 (n) | 3.7 | 2 000 | 9/06 am, pm | Peg I 1.18 |
| | | | 75 (P) | 75 (P) | 4.2 | 2 400 | | |
| " | " | 0335 | 120 | 134 | 3.7 | 3 600 | 9/07 am | " 1.68 |
| | | | | | 4.2 | 2 250 | | |
| 4-6-4564 | New River | 0540 | 71 | 68 | 4.2 | 2 400 | 9/07 am | " .77 |
| 4-6-4663 | Lepreau River | 0337 | 29 | 28 | 4.2 | 1 000 | 9/07 pm | " .31 |
| 4-6-4563 | Victoria Lk. | 0145 (n) | 30 | 35 | 4.2 | 1 330 | 9/07 pm, 08 pm | " .62 |
| " | " | 9539 | 17 | 15 | Garlon @ 4.2 | 670 | 9/07 pm | " .27 |
| " | " | 0759 | 82 (n) | 30 | Garlon @ 4.2 | 1 330 | 9/07 pm, 08 pm | " 1.17 |
| | | | 19 (P) | 71 | Vision @ 4.2 | 3 070 | | |
| " | " | 0007 (n) | 70 | 54 | 4.2 | 2 800 | 9/08 pm | " .72 |
| 4-6-4663 | Lepreau River | 9524 | 30 | 32 | 4.2 | 1 530 | 9/08 pm | " .58 |
| 4-6-4563 | Victoria Lk | Container Trial | 3 | 3 | 4.2 | 130 | 9/08 pm | " .07 |
| 4-6-4662 | E. of West Long Lk. | 0155 (n) | 2 | 3 | 4.2 | 130 | 9/08 pm | " .07 |
| 4-6-4161 | S. of Flume Ridge | 1145 | 128 | 148 | 4.2 | 6 130 | 9/09 pm, 10 am | " 1.73 |
| " | " | 1144 | 44 (n) | 20 | Garlon @ 4.2 | 750 | 9/10 am | " 1.07 |
| | | | 41 (P) | 20 | Garlon @ 4.9 | 750 | | 26.57 |
| | | | | 20 | Garlon @ 2.1 & Vision @ 2.1 | 750 | | |
| | | | | 46 | Vision @ 4.2 | 1 200 | | |
| Sub-Total | | | 1 866 | 2 009 | 3.7 | 5 600 | | |
| | | | 530 (n) | 533 (n) | 4.2 | 64 640 | | |
| | | | | | 4.9 | 5 280 | | |
| | | | | | Garlon @ 4.2 | 2 750 | | |
| | | | | | Garlon @ 4.9 | 750 | | |
| | | | | | Garlon @ 2.1 & Vision @ 2.1 | 750 | | |
| | | | | | | 79 770 | | |

1989 HERBICIDE PROGRAM

LICENSEE: Queens Charlotte (Con't)

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 4-6-4463 | 1988 Banding | 0547 (n) | 20 | 20 | 4.2 | 800 | 9/06 am | Peg 1 .32 |
| 4-6-4160 | " | 9055 (n) | 40 | 40 | 4.2 | 1 600 | 9/10 am | " .62 |
| Sub-Total | | | 60 (n) | 60 (n) | 4.2 | 2 400 | | .94 |
| Region 4 Total | | | 1 926 | 2 069 | 3.7 | 5 600 | | |
| | | | 590 (n) | 593 (n) | 4.2 | 67 640 | | 27.51 |
| | | | | | 4.9 | 5 280 | | |
| | | | | | Garlon (2.1) & Vision (2.1) | 750 | | |
| | | | | | Garlon 4.2 | 2 750 | | |
| | | | | | Garlon 4.9 | 750 | | |
| | | | | | | 82 770 | | |
| TOTAL | | | 8 106 | 7 845 | 3.7 | 22 439 | | 97.13 |
| | | | 4 110 (n) | 3 842 (n) | 4.2 | 158 810 | | |
| | | | | | 4.9 | 87 868 | | |
| | | | | | Garlon (2.1) & Vision (2.1) | 1 228 | | |
| | | | | | Garlon 4.2 | 5 550 | | |
| | | | | | Garlon 4.9 | 1 880 | | |
| | | | | | | 277 775 | | |

## 1989 HERBICIDE PROGRAM

LICENSEE: Queens Charlotte (Con't)

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 3-7-5646 | N of Foley Meadow Bk | 0046 (n) | 46 | 46 | 4.9 | 1 555 | 9/04 am | Reg 2 .83 |
| 3-7-5546 | Coal Ck. | 0045 (n) | 175 | 20 | Garlon 4.2 | 1 122 | 9/06 am | " 2.25 |
| | | | | 20 | Garlon 4.9 | 1 122 | 9/04 am | |
| | | | | 142 | Vision 4.9 | 3 350 | | |
| 3-7-5547 | W. of Cranberry Lk. | 0126 (n) | 133 | 143 | 4.9 | 4 690 | 9/04 am, pm; 05 am | " 1.63 |
| 3-7-5648 | Hector Bk. | 0125 (n) | 58 | 62 | 4.9 | 2 010 | 9/05 am | " .83 |
| 3-7-6058 | Goose Ck. | 0349 | 76 | 71 | 4.2 | 2 785 | 9/10 pm | Reg 1 .78 |
| " | " | 0346 | 118 | 115 | 4.2 | 4 140 | 9/10 pm, 11 am | " 1.21 |
| 3-7-6156 | Haslam Bk. | Container Trial | 3 | 3 | 4.2 | 100 | 9/11 am | " .20 |
| 3-7-6056 | N.E. of Pt. Wolfe R. | 0115 | 13 | 11 | 4.2 | 430 | 9/11 am | " .33 |
| 3-7-5958 | Head of Quiddy R. | 0347 | 41 | 43 | 4.2 | 1 600 | 9/11 am | " 1.17 |
| " | " | 0009 | 87 | 97 | 4.2 | 3 600 | 9/11 am | " 1.07 |
| 3-7-5959 | Rapidy Bk. | 0219 | 116 | 110 | 3.7 | 2 800 | 9/11 am | " 2.03 |
| | | | | | 4.2 | 2 400 | | |
| 3-7-5859 | Little Bonnell Bk. | 0364 | 103 | 105 | 3.7 | 4 492 | 9/12 am, pm; 13 am | " 1.68 |
| 3-7-5860 | Mary Pitcher Lk. | 8823 | 36 | 41 | 3.7 | 2 000 | 9/12 pm | " .87 |
| " | " | 0371 | 43 | 41 | 3.7 | 1 200 | 9/12 pm | " .52 |
| 3-7-5759 | " | 0460 | 84 | 88 | 3.7 | 2 930 | 9/12 pm | " .75 |
| " | " | 0377 | 106 | 103 | 3.7 | 4 000 | 9/12 pm | " .93 |
| 3-7-6345 | Shaw Bk. | 0059 | 104 | 87 | 4.2 | 4 400 | 9/13 pm | " 1.15 |
| 3-7-5550 | S. Br. Miller Bk. | 0005 | 19 | 19 | 4.2 | 800 | 9/14 am | " .30 |
| 3-7-5650 | Miller Bk. | 0484 | 125 | 125 | 4.2 | 5 600 | 9/14 am | " 1.15 |
| Sub-Total | | | 1 486 | 1 492 | 3.7 | 17 422 | | 19.68 |
| | | | 412 (n) | 433 (n) | 4.2 | 25 855 | | |
| | | | | | 4.9 | 11 605 | | |
| | | | | | Garlon 4.2 | 1 122 | | |
| | | | | | Garlon 4.9 | 1 122 | | |
| | | | | | | 57 126 | | |
| 3-7-5546 | 1988 Banding | 9961 (n) | 80 (n) | 50 (n) | 4.9 | 1 675 | 9/04 am | Reg 2 1.38 |
| Region 3 Total | | | 1 566 | 1 542 | 3.7 | 17 422 | | 21.06 |
| | | | 492 (n) | 483 (n) | 4.2 | 25 855 | | |
| | | | | | 4.9 | 13 280 | | |
| | | | | | Garlon 4.2 | 1 122 | | |
| | | | | | Garlon 4.9 | 1 122 | | |
| | | | | | | 58 801 | | |

1989 HERBICIDE PROGRAM

LICENSEE: Fundy

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 4-7-4644 | Glencoe Rd. | 9508 | 161 | 168 | 3.7 | 570 | 8/29 am | Peg I 2.02 |
| | | | | | 4.2 | 6 400 | | |
| " | " | 0407 | 74 | 90 | 3.7 | 3 600 | 8/29 am | " .93 |
| " | " | 0313 | 25 | 27 | 3.7 | 1 330 | 8/29 am | " .47 |
| 4-7-4744 | Tamarack Bk. | 0405 | 74 | 74 | 3.7 | 3 200 | 8/29 am | " 2.05 |
| 4-7-4846 | N. of Fork Bk. | 0103 | 44 | 50 | 3.7 | 400 | 8/31 am; 9/01 am | " .80 |
| | | | | | 4.2 | 1 200 | | |
| " | " | 6000 | 11 | 8 | 3.7 | 400 | 9/01 am | " .28 |
| " | " | 0403 | 40 | 41 | 3.7 | 1 200 | 9/01 am | " .87 |
| | | | | | 4.2 | 600 | | |
| 4-7-4747 | Head of Bear Bk. | 0104 | 52 | 53 | 4.2 | 2 200 | 9/01 am | " .72 |
| Region 4 Total | | | 481 | 511 | 3.7 | 10 800 | | 8.14 |
| | | | | | 4.2 | 10 400 | | |
| | | | | | | 21 200 | | |
| TOTAL | | | 2 047 | 2 053 | 3.7 | 26 352 | | 29.20 |
| | | | 492 (n) | 483 (n) | 4.2 | 38 125 | | |
| | | | | | 4.9 | 13 280 | | |
| | | | | | Garlon 4.2 | 1 122 | | |
| | | | | | Garlon 4.9 | 1 122 | | |
| | | | | | | 80 001 | | |

## 1989 HERBICIDE PROGRAM

LICENSEE: York

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 4-8-4245 | N. Tay R. | 0227 | 79 | 79 | 4.2 | 2 600 | 8/23 am; 27 am, pm | Peg I 1.37 |
| | | | | *36 re-sprayed | 4.2 | 1 450 | | |
| " | " | 0086 | 108 | 140 | 4.2 | 4 800 | 8/27 am, 28 am | " 1.58 |
| " | " | 0225 | 36 | 38 | 4.2 | 1 400 | 8/27 am | " .45 |
| 4-8-4344 | Grand John | 0186 | 84 | 73 | 4.2 | 3 200 | 8/27 pm | " 1.12 |
| 4-8-4243 | Rocky Bk. | 0065 | 20 | 21 | 4.2 | 800 | 8/28 am | " .53 |
| 4-8-4545 | Red Rock Rd. | 0066 | 106 | 103 | 4.2 | 4 400 | 8/28 am | " 2.20 |
| 4-8-4250 | Mactaquac Stm. | 0013 | 10 | 9 | 4.2 | 400 | 9/02 pm | " .12 |
| " | " | 0014 | 80 | 82 | 4.2 | 3 200 | 9/02 pm | " .72 |
| 4-8-4053 | Magundy Bk. | 0097 | 97 | 104 | 4.2 | 4 800 | 9/03 am | " 1.25 |
| " | " | 0027 | 59 | 55 | 4.2 | 2 400 | 9/03 am | " .75 |
| 4-8-4054 | Blaney Ridge | 0098 | 52 | 60 | 4.2 | 2 400 | 9/03 am | " .92 |
| 4-8-4259 | Little Kedron Lk | 0152 | 61 | 59 | 4.2 | 2 340 | 9/10 am | " 1.22 |
| 4-8-4159 | Magaguadavic R. | 0103 | 25 | 27 | 4.2 | 1 300 | 9/10 am | " .62 |
| Sub-Total | | | 817 | 867 | 4.2 | 35 490 | | 12.83 |
| 4-8-4545 | 1988 Banding | 0067 | 25 | 25 | 4.2 | 930 | 8/28 pm | Peg. I .30 |
| " | " | 0111 | 35 | 39 | 4.2 | 1 470 | 8/28 pm | " .52 |
| Sub-Total | | | 60 | 64 | 4.2 | 2 400 | | .82 |
| TOTAL | | | 877 | 931 | 4.2 | 37 890 | | 13.65 |

## 1989 HERBICIDE PROGRAM

LICENSEE: Carleton

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 4-9-3939 | Juniper Dump | 0136 | 101 | 140 | 3.7 | 4 000 | 8/21 am | Peg 2 1.62 |
| | | | | | 4.2 | 1 200 | | |
| 4-9-4042 | East Brook | 0160 | 57 | 57 | 4.2 | 2 200 | 8/22 pm | " .80 |
| 4-9-4041 | Nashwaak R. | 0067 | 39 | 39 | 4.2 | 1 600 | 8/22 pm | " .68 |
| 4-9-4040 | Nashwaak L. | 0075 | 43 | 20 | 4.2 | 600 | 8/22 pm | " .43 |
| 4-9-4141 | W. Br. Napodogan Bk. | 0092 | 14 | 14 | 4.2 | 800 | 8/22 pm | " .47 |
| " | " | 0093 | 19 | 19 | 4.2 | 800 | 8/23 am | " .25 |
| " | " | 0040 | 15 | 15 | 4.2 | 800 | 8/23 am | " .28 |
| " | " | 0101 | 105 | 105 | 4.2 | 4 300 | 8/23 am | " 1.12 |
| 4-9-4542 | Mavis Mills | 0008 | 18 | 18 | 4.2 | 800 | 8/28 pm | " .52 |
| Sub-Total | | | 411 | 427 | 3.7 | 4 000 | | 6.17 |
| | | | | | 4.2 | 13 100 | | |
| | | | | | | 17 100 | | |
| 4-9-4542 | 1988 Banding | 0036 | 60 | 43 | 4.2 | 1 600 | 8/28 pm | Peg 2 .90 |
| Total | | | 471 | 470 | 3.7 | 4 000 | | 7.07 |
| | | | | | 4.2 | 14 700 | | |
| | | | | | | 18 700 | | |

1989 HERBICIDE PROGRAM

LICENSEE: Restigouche-Tobique

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 1-10-3616 | Kedgwick R. | 520 | 23 | 14 | 4.2 | 800 | 8/17 am | Peg I .45 |
| " | " | 436 | 54 | 63 | 4.2 | 2 800 | 8/17 am | " 1.35 |
| 1-10-3615 | Whitewater Bk. | 435 | 40 | 50 | 4.2 | 2 400 | 8/17 am | " 2.20 |
| 1-10-3616 | Kedgwick R. | 523 | 37 | 45 | 4.2 | 2 000 | 8/17 am | " .87 |
| " | " | 529 | 24 | 26 | 4.2 | 1 200 | 8/17 am, pm | " .97 |
| " | " | 519 | 37 | 37 | 4.2 | 1 470 | 8/17 pm, 18 am | " .87 |
| 1-10-3516 | S.E. of Eighteen M.Lk | 508 | 7 | 8 | 4.2 | 330 | 8/18 am | " .23 |
| 1-10-3616 | Kedgwick R. | 442 | 19 | 23 | 4.2 | 930 | 8/18 am | " .60 |
| 1-10-3517 | Mt. Connacher | 524 | 12 | 12 | 4.2 | 600 | 8/18 am | " .42 |
| 1-10-3512 | Six Mile Bk. | 495 | 18 | 21 | 4.2 | 796 | 8/18 am | OBF .60 |
| Sub-Total | | | 271 | 299 | 4.2 | 13 326 | | 8.56 |
| 1-10-3514 | 1988 Banding | 135,136,137 | 21 | 17 | 4.2 | 625 | 8/18 am | OBF .73 |
| " | " | 120 | 30 | 77 | 4.2 | 2 862 | 8/15 am, 18 am | " 1.95 |
| " | " | 341 | 10 | 5 | 4.2 | 170 | 8/18 am | " .17 |
| " | " | 342 | 10 | 19 | 4.2 | 720 | 8/18 am | " .68 |
| Sub-Total | | | 71 | 118 | 4.2 | 4 377 | | 3.53 |
| Total Region I | | | 342 | 417 | 4.2 | 17 703 | | 12.09 |
| 5-10-3921 | W. of Beaver Bk. | 458 | 19 | 19 | 4.2 | 1 100 | 8/16 pm, 18 am | Peg I 1.00 |
| 5-10-3920 | Big Cedar Bk. | 459 | 28 | 30 | 4.2 | 1 150 | 8/17 pm, 18 am | " 1.35 |
| 5-10-3617 | Four Mile Bk. | 412 | 12 | 12 | 4.2 | 1 150 | 8/18 am | " .53 |
| 5-10-3416 | Narrows Bk. | 438 | 7 | 7 | 4.2 | 300 | 8/18 am | " .22 |
| " | " | 439 | 21 | 17 | 4.2 | 1 200 | 8/18 am | " .75 |
| 5-10-3516 | Falls Bk. | 423 | 8 | 4 | 4.2 | 370 | 8/18 am | " .20 |

1989 HERBICIDE PROGRAM

LICENSEE: Restigouche-Tobique (Con't)

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) |
|---|---|---|---|---|---|---|---|---|
| 5-10-3016 | Nine Mile Bk. | 427 | 18 | 20 | 4.2 | 700 | 8/18 pm | Peg I .27 |
| " | " | 426 | 59 | 59 | 4.2 | I 550 | 8/18 pm | " .52 |
| 5-10-3216 | N.W. of Cherry Bk. | 450 | 38 | 37 | 4.2 | I 400 | 8/18 pm | " .75 |
| 5-10-3116 | W. Br. Gounamitz R. | 449 | 11 | 11 | 4.2 | 600 | 8/18 pm | " .37 |
| 5-10-3215 | S.E. of Couturier Bk. | 448 | 13 | 13 | 4.2 | 800 | 8/18 pm | " .60 |
| 5-10-2817 | W. of Gagne Bk. | 420 | 10 | 10 | 4.2 | 400 | 8/19 pm | " .33 |
| 5-10-3116 | Caribou Bk. | Family Test | 5 | 5 | 4.2 | 200 | 8/20 am | " .37 |
| 5-10-3115 | S. of Couturier Bk. | 447 | 8 | 10 | 4.2 | 400 | 8/20 am | " .73 |
| 5-10-3221 | Quisibis Mtn. | 443 | 35 | 40 | 4.2 | I 870 | 8/20 am | " 1.36 |
| " | " | 444 | 15 | 17 | 4.2 | 800 | 8/20 am | " .84 |
| 5-10-3120 | Brown Bk. | 349 | 16 | 11 | 4.2 | 430 | 8/20 am | " .35 |
| " | " | Family Test FT-17-87 | 3 | 3 | 4.2 | 100 | 8/20 am | " .07 |
| 5-10-2818 | S.W. of Halfway Depot | 451 | 23 | 23 | 4.2 | I 070 | 8/20 am | " 1.18 |
| 5-10-3020 | Green R. | 530 | 13 | 13 | 4.2 | 650 | 8/20 am | " .40 |
| " | " | Container Trail | 10 | 10 | 4.2 | 370 | 8/20 am | " .22 |
| " | " | 526 | 27 | 28 | 4.2 | I 250 | 8/20 am | " .52 |
| 5-10-3411 | States Lk. | 431 | 36 | 39 | 4.2 | I 575 | 8/15 am | CFB 1.00 |
| " | " | 429 | 31 | 34 | 4.2 | I 213 | 8/15 am | " .78 |
| 5-10-3314 | Clearwater Lk. | 419 | 15 | 13 | 4.2 | 625 | 8/15 pm | " .48 |
| " | " | 3314 | 29 | 24 | 4.2 | I 270 | 8/15 pm, 17 pm | " .67 |
| 5-10-3313 | Black Bk. | 528 | 100 | 129 | 4.2 | 5 041 | 8/17 pm, 19 am | " 3.45 |
| 5-10-3414 | N. Br. Clearwater Bk. | 440 | 26 | 26 | 4.2 | I 231 | 8/18 am | " .88 |
| " | " | 441 | 43 | 43 | 4.2 | I 631 | 8/18 am | " 1.20 |

1989 HERBICIDE PROGRAM

LICENSEE: Restigouche-Tobique (Con't)

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) | |
|---|---|---|---|---|---|---|---|---|---|
| 5-10-3314 | Clearwater Lk. | 421 | 7 | 9 | 4.2 | 171 | 8/18 am | CBF | .20 |
| 5-10-3313 | Black Bk. | 3313 | 7 | 7 | 4.2 | 132 | 8/18 am | " | .12 |
| 5-10-3113 | Portage Bk. | 415 | 20 | 21 | 4.2 | 948 | 8/18 am | " | .48 |
| " | " | 416 | 6 | 8 | 4.2 | 455 | 8/18 am | " | .32 |
| " | " | 417 | 30 | 33 | 4.2 | 871 | 8/18 am | " | .60 |
| " | " | 418 | 22 | 24 | 4.2 | 1 118 | 8/18 am, pm | " | .70 |
| 5-10-3212 | N. of Old Shanty Bk. | 437 | 13 | 13 | 4.2 | 588 | 8/18 pm | " | .42 |
| 5-10-3112 | N. of Little Fifteen Mile Bk. | 456 | 16 | 18 | 4.2 | 568 | 8/18 pm | " | .49 |
| 5-10-2812 | Wild Goose Lk | 3302 | 25 | 25 | 4.2 | 758 | 8/19 am | " | .83 |
| 5-10-2913 | McDonald Bk. | 445 | 50 | 50 | 4.2 | 2 274 | 8/19 am | " | 1.25 |
| 5-10-3315 | N. of Fork Falls Bk. | 428 | 6 | 6 | 4.2 | 227 | 8/19 am | " | .19 |
| Sub-Total | | | 881 | 921 | 4.2 | 37 936 | | | 26.99 |
| 5-10-4423 | Mt. Edward | 5174 (n) | 29 | 29 | 4.5 | 1 100 | 8/17 pm | Fraser | N/A |
| " | " | 5036 | 20 | 20 | 4.5 | 825 | 8/17 pm | " | " |
| 5-10-4324 | Giberson Bk. | 5040 | 33 | 33 | 4.5 | 1 200 | 8/17 pm | " | " |
| 5-10-4424 | Little S. Br. Nepisiguit R. | 5042 | 3 | 3 | 4.5 | 100 | 8/17 pm | " | " |
| " | " | 5043 | 4 | 5 | 4.5 | 200 | 8/17 pm | " | " |
| 5-10-3930 | Oxbow Island | 5021 | 14 | 14 | 4.5 | 800 | 9/01 am | " | " |
| " | " | 5020 | 4 | 4 | 4.5 | 250 | 9/01 am | " | " |

1989 HERBICIDE PROGRAM

LICENSEE: Restigouche-Tobique (Con't)

| Area # | Location | Block # | Original Area (ha) | Treated Area | Rate of Vision (L/ha) | Volume Delivered (L) | Dates Sprayed month/day/morning or evening | Applicators Spray Time (hrs) | |
|---|---|---|---|---|---|---|---|---|---|
| 5-10-4325 | McKeen Bk. | 5028 | 70 | 70 | 4.5 | 2 750 | 8/17 am | " | " |
| " | " | 5062(503) | 40 | 40 | 4.5 | 1 520 | 8/17 am | " | " |
| 5-10-4326 | W. of Greer Lk. | 5041 | 22 | 22 | 4.5 | 825 | 8/17 pm | " | " |
| " | " | 5064 (n) | 8 | 8 | 4.5 | 225 | 8/17 pm | " | " |
| *Sub-Total | | | | 247 | 248 | 4.5 | 9 795 | | |
| | | | 37 (n) | 37 (n | | | | | |
| 5-10-3618 | 1988 Banding | 335 | 15 | 7 | 4.2 | 270 | 8/18 am | Peg 1 | .34 |
| 5-10-3411 | " | 122 (n) | 150 | 89 | 4.2 | 3 335 | 8/15 am | CBF | 1.62 |
| " | " | 123 (n) | 40 | 41 | 4.2 | 1 516 | 8/15 am | " | .70 |
| 5-10-3212 | " | 116 (n) | 30 | 31 | 4.2 | 1 175 | 8/18 pm, 19 am | " | .71 |
| Sub-Total | | | 235 | 168 | 4.2 | 6 296 | | | 3.37 |
| | | | 220 (n) | 161 (n) | | | | | |
| Total Region 5 | | | 1 363 | 1 337 | 4.2 | 44 232 | | | 30.36 |
| | | | 257 (n) | 198 (n) | 4.5 | 9 795 | | | |
| | | | | | | 54 027 | | | |
| TOTAL | | | 1 705 | 1 754 | 4.2 | 61 936 | | | 42.45 |
| | | | 257 (n) | 198 (n) | 4.5 | 9 795 | | | |

* These were Crown blocks treated by Fraser Co. (used a higher Vision rate). DNRE treated 244 ha of Fraser Freehold in exchange at a 4.2 l/ha Vision rate; total delivered volume - 11 800 ha; total flight time - 6.42 hrs.

The trade was made for logistic purposes - they had no other Freehold blocks in Edmundston area and DNRE had no other Crown land in the Plaster Rock area.